

USPTO Serial No. 10/634,259 (Docket No. ROSS-006)

**In the Abstract:** (strikethrough parts deleted and underlined parts added)

No changes to be made in the Abstract.

**In the Specification:** (strikethrough parts deleted and underlined parts added)

No changes to be made in the Specification.

**In the Claims:** (strikethrough parts deleted and underlined parts added)

**Please delete Claims 4 and 17-20 without prejudice.**

1. (Currently Amended) A boatlift buoyancy system, comprising:  
a first tube and a second tube removably attachable to a plurality of horizontal support beams of a boatlift, wherein said tubes are capable of receiving ~~of a~~ volume of air and/or water;

wherein said plurality of horizontal support beams are immovably affixed to a plurality of vertical post members; and

a first hose and a second hose fluidly connected to said first tube and said second tube respectively for providing pressurized air for creating buoyancy.

2. (Currently Amended) The boatlift buoyancy system of Claim 1, wherein said first tube and said second tube are removably attachable to a ~~boat-lift~~ boatlift by a plurality of attachment brackets.

3. (Original) The boatlift buoyancy system of Claim 2, wherein said attachment brackets are comprised of a U-member with threaded distal ends, a plate with a plurality of apertures for receiving said U-member, and a plurality of fastener nuts threadably attachable to said threaded distal ends.

USPTO Serial No. 10/634,259 (Docket No. ROSS-006)

4. (Canceled)
5. (Original) The boatlift buoyancy system of Claim 1, wherein said tubes are orientated substantially horizontal when attached to a boatlift.
6. (Original) The boatlift buoyancy system of Claim 1, wherein said first hose and said second hose have a first nozzle and a second nozzle for allowing input of pressurized air, wherein said first nozzle and said second nozzle have a valve structure.
7. (Original) The boatlift buoyancy system of Claim 1, including a valve unit fluidly connected to said first hose and said second hose, wherein said valve unit includes a fill nozzle and a release nozzle.
8. (Original) The boatlift buoyancy system of Claim 1, including a connecting hose having a connecting nozzle, wherein said connecting hose is fluidly connected to said first hose and said second hose and wherein said connecting nozzle has a valve structure.
9. (Original) The boatlift buoyancy system of Claim 1, wherein said first tube and said second tube have a first aperture and a second aperture respectively within lower portions thereof for allowing draining of water when pressurized air is input into said tubes and for allowing water to enter said tubes when pressurized air is allowed to escape from said tubes.

USPTO Serial No. 10/634,259 (Docket No. ROSS-006)

10. (Original) The boatlift buoyancy system of Claim 9, including a first screen and a second screen positioned about said first aperture and said second aperture for keeping debris from entering within said tubes.

11. (Currently Amended) A boatlift buoyancy system, comprising:

a boatlift having a first tube and a second tube attached in a horizontal manner to a plurality of horizontal support beams immovably positioned between vertical post members-in-a-horizontal manner, wherein said tubes are capable of receiving ~~ef~~a volume of air and/or water;

wherein said first tube and said second tube have a first aperture and a second aperture respectively within lower portions thereof for allowing draining of water when pressurized air is input into said tubes and for allowing water to enter said tubes when pressurized air is allowed to escape from said tubes; and

wherein as said tubes receive said volume of air, said plurality of horizontal support beams and said vertical post members simultaneously move in an upward manner; and

a first hose and a second hose fluidly connected to said first tube and said second tube respectively for providing pressurized air for creating buoyancy.

12. (Original) The boatlift buoyancy system of Claim 11, wherein said first hose and said second hose have a first nozzle and a second nozzle for allowing input of pressurized air, wherein said first nozzle and said second nozzle have a valve structure.

USPTO Serial No. 10/634,259 (Docket No. ROSS-006)

13. (Original) The boatlift buoyancy system of Claim 11, including a valve unit fluidly connected to said first hose and said second hose, wherein said valve unit includes a fill nozzle and a release nozzle.

14. (Original) The boatlift buoyancy system of Claim 11, including a connecting hose having a connecting nozzle, wherein said connecting hose is fluidly connected to said first hose and said second hose and wherein said connecting nozzle has a valve structure.

15. (Original) The boatlift buoyancy system of Claim 11, including a first screen and a second screen positioned about said first aperture and said second aperture for keeping debris from entering within said tubes.

16. (Currently Amended) A method of operating a boatlift buoyancy system either raising a boatlift off of the ground underneath the water in an upward fashion or lowering said boatlift to contact the ground underneath the water, said boatlift having a first tube and a second tube attached to said boatlift, including a first aperture and a second aperture within a lower portion of said first tube and said second tube respectively, said method comprising the steps of:

(a) inputting pressurized air into said first tube and said second tube thereby expelling any water within said tubes through said apertures and increasing the buoyancy of said tubes;

(b) maneuvering said boatlift to a desired position; and

(c) releasing said pressurized air from said first tube and said second tube thereby allowing water to enter said tubes through said apertures and reducing the buoyancy of said tubes.

17. (Canceled)

USPTO Serial No. 10/634,259 (Docket No. ROSS-006)

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (New) The boatlift buoyancy system of Claim 11, wherein said horizontal support members are immovably attached to said vertical post members.

22. (New) The method of operating a boatlift buoyancy system of Claim 16, wherein increasing the buoyancy of said tubes causes the boatlift to move from the ground underneath the water up toward the surface of the water.

23. (New) The method of operating a boatlift buoyancy system of Claim 16, wherein reducing the buoyancy of said tubes causes the boatlift to move from the surface of the water down toward the ground underneath the water.

USPTO Serial No. 10/634,259 (Docket No. ROSS-006)

**C. APPLICANT'S COMMENTS**

Claims 1-3, 5-16 are pending in this Application, with Claims 4, 17-20 canceled, with Claims 1, 2, 11, 16 being amended and Claims 21 - 23 being added. No new matter is added by way of these amendments, and the amendments are supported throughout the Specification and the drawings. Reconsideration of Claims 1-3, 5-16 and favorable consideration of Claims 21-23 is respectfully requested.

The Examiner's rejections will be considered in the order of their occurrence in the Official Action.

**Paragraphs 1-2 of the Official Action**

**A. Anticipation by Williams**

The Official Action rejected as-filed Claims 1-5 and 16 - 20 under 35 U.S.C. §102(b) as being anticipated by Williams. The Applicant respectfully disagrees with this rejection particularly in view of the amendments made to the claims.

It is important to first briefly discuss 35 U.S.C. §102 and its application to the present application. Under section 102(b), anticipation requires that the prior art reference disclose, either expressly or under the principles of inherency, every limitation of the claim.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Under 35 U.S.C. §102, anticipation requires that each and every element of the claimed invention be disclosed in the prior art. In addition, the prior art reference must

USPTO Serial No. 10/634,259 (Docket No. ROSS-006)

be enabling, thus placing the allegedly disclosed matter in the possession of the public. *Akzo N.V. v. United States Int'l Trade Comm'n*, 1 USPQ 2d 1241, 1245 (Fed. Cir. 1986), cert. denied, 482 U.S. 909 (1987) (emphasis added). Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration. *W.L. Gore & Assocs. v. Garlock, Inc.*, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim. *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984).

Williams discloses a "Vertical Boat Lift," which teaches the use of an air compressor to fill a pontoon with air, thereby lifting the pontoon out of the water. The anticipation of the present invention by Williams ends there. Williams further states that the device is for lifting and storing boats out of the water wherein "the lift [is] arranged for mounting **in a boat well having opposed parallel vertical sidewalls**." Additionally, Williams claims "four guide members," each having "an elongated slot" that slidably receives a "trunnion member." Finally, in pertinent part, Williams claims "a pontoon secured to the lower portion of said frame."

The present invention has many distinguishing features from the claims, description and drawings of Williams. More particularly, the present invention demonstrates the use of the "pontoon" on a boatlift that does not need a boat well to function; the boatlift may be freestanding and positioned alongside a dock. Furthermore, the pontoons in the present invention are not attached to the "lower portion" of the frame as shown Figure 2 of Williams. As shown in Figures 1-3b of the present invention, the tubes are preferably secured to the outer-facing sides of the support beams, which is not possible in Williams because of the presence of the side members of the boat well. Yet another difference between Williams and the present invention includes the present invention's ability to be reused upon different varieties of boatlifts having parallel support beams. This allows a user to buy one boatlift buoyancy system to use when positioning a variety of different boatlifts the user may own.

USPTO Serial No. 10/634,259 (Docket No. ROSS-006)

The use and purpose of the present invention further distinguish it from Williams. Williams is used to lift a boat out of the water. The present invention is meant to raise the entire boatlift off of the ground underneath the water allowing simplified re-positioning of the boatlift. For Williams to allow for re-positioning of the boatlift, the actual boatlift would have to be unfastened from the sidewalls or would require lifting the entire dock structure because the lift is attached to the boat well, which is attached to a dock structure.

The Applicant respectfully submits that Williams does not qualify as appropriate prior art under 35 U.S.C. §102(b) as Williams does not disclose (expressly or inherently) all of the elements of independent Claims 1, 11 and 16.

**B. Inherency to Williams**

The Official Action rejected as-filed Claim 16 under 35 U.S.C. §102(b) as being inherent to Williams. The mere fact that a certain thing may result from a given set of circumstances is not sufficient [to establish inherency] . . . [which requires that] the disclosure is sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function. *In re Weiss*, 26 USPQ 2d 1885, 1888 (Fed. Cir. 1993) (unpublished). “[T]he examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.” *Ex parte Levy*, 17 USPQ 2d 1461, 1464 (B.P.A.I. 1990).

If the prior art reference does not expressly set forth a particular element of the claim, that reference still may anticipate if that element is “inherent” in its disclosure. To establish inherency, the extrinsic evidence “must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.” . . . “Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *In re Robertson*,

USPTO Serial No. 10/634,259 (Docket No. ROSS-006)

49 USPQ 2d 1949, 1950-51 (Fed. Cir. 1999) (quoting Continental Can Co. v. Monsanto Co., 20 USPQ 2d 1746, 1749 (Fed. Cir. 1991)).

As mentioned, Williams provides movement of the lifting apparatus **to lift a boat out of the water** by use of a pontoon. The boatlift in Williams is positioned within and connected to the surrounding boat well's vertical sidewalls. The method of moving the boatlift would require movement of the entire dock structure surrounding the vertical sidewalls.

The present invention provides a buoyancy means consisting of injecting compressed air into tubes **to lift the entire boatlift off of the ground underneath the surface of the water**. The method provided in Williams simply allows for lifting boats out of the water as a boatlift normally would. Claim 16 of the present invention provides **a method of lifting an entire boatlift off of the ground underneath the surface of the water** and subsequent lowering of the entire boatlift to the ground under the water, thereby facilitating simplified re-positioning of the entire boatlift.

The Applicant respectfully submits that neither Williams nor the other references provide adequate support for an "inherency" argument as there is no basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic from Williams necessarily flows from the teachings of the applied prior art.

Claims 17 – 20 have been canceled as amended; therefore the Applicant respectfully requests that the Examiner consider Claims 17 – 20 moot.

**Paragraphs 3-4 of the Official Action**

The Official Action rejected Claims 6 - 9 under 35 U.S.C. §103(a) as being unpatentable over Williams in view of Rutter. The Applicant respectfully disagrees with this rejection of these claims, particularly as the same are now amended.

USPTO Serial No. 10/634,259 (Docket No. ROSS-006)

In proceedings before the United States Patent and Trademark Office, the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art. *In re Bell*, 26 USPQ2d 1529, 1530 (Fed. Cir. 1993). *In re Oetiker*, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). When references cited by the Examiner fail to establish a prima facie case of obviousness, the rejection is improper and will be overturned upon appeal. *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985).

"To establish a prima facie case of obviousness, three basic criteria must be met." MPEP §706.02(j). First, there must be some **suggestion or motivation**, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a **reasonable expectation of success**. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The law regarding *obviousness* is clear -- any modification of the prior art must be suggested or motivated by the prior art. It is submitted that combining elements from different prior art references (in an attempt to establish obviousness) must be motivated or suggested by the prior art.

'Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so.' [citation omitted] Although couched in terms of combined teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious "modification" of the prior art. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.

*In re Fritch*, 972 F.2d 1260; 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992), (in part quoting from *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577; 221 USPQ 929, 933 (Fed. Cir. 1984)).

USPTO Serial No. 10/634,259 (Docket No. ROSS-006)

It is also submitted that the mere fact that one may argue that the prior art is capable of being modified to achieve a claimed structure does not by itself make the claimed structure obvious -- there must be a motivation provided by the prior art.

The examiner finds the claimed shape would have been obvious urging that (our emphasis) "it is obvious for one skilled in the art to form each hook base of any desired shape \*\*\* since *this is within the capabilities of such a person.*" Thus, the examiner equates that which is within the capabilities of one skilled in the art with obviousness. Such is not the law. There is nothing in the statutes or the case law which makes "that which is within the capabilities of one skilled in the art" synonymous with obviousness.

The examiner provides no reason why, absent the instant disclosure, one of ordinary skill in the art would be motivated to change the shape of the coil hooks of Hancock or the German patent and we can conceive of no reason.

*Ex parte Gerlach and Woerner*, 212 USPQ 471 (PTO Bd. App. 1980) (emphasis in original).

As to rejected Claim 6 as-filed, Rutter describes four separate valves to fill different chambers of the pontoons at different speeds to provide for controlled raising and lowering of the lift. The Applicant contends that the four separate valves provided for in Rutter are unnecessary when trying to float a boatlift to the surface of the water. When raising a boat, it is desirable to raise certain parts of the lifting structure sequentially. However, when there is no boat on the lift, it is more desirable to fill the pontoons as fast as possible without worry of picking the right valves to open first. This process is desirable because often the vertical supports can be stuck under sand or mud under the water, so immediately filling the pontoons with air encourages the vertical supports to become dislodged.

Rejected Claim 7 as-filed speaks of a valve unit, which the Examiner considered analogous to the valve assembly in Rutter. Although there may have been valves to fill separate chambers of the pontoons, Rutter speaks in its Specification of the hoses "connected through a series of valves to a compressed air supply." The valve unit in the present invention, as shown in Figure 8, structurally illustrates and defines the valve unit. The valve unit is in a simple cross shape with valves located at each appendage.

USPTO Serial No. 10/634,259 (Docket No. ROSS-006)

The Applicant contends that the cross shaped valve unit with valves at each appendage is not analogous to an ambiguous statement such as "hoses connected through a series of valves to a compressed air supply."

Claim 8 of the present invention was rejected as-filed as well. The Applicant contends that review of Figure 6 does not show any specific structure of Rutter that would make Rutter analogous to the Y-shaped hose shown in Figures 4 and 5 of the present invention's drawings. The present invention shows an advantageous hose running directly to the tubes, whereas the structure and drawings of Rutter show the source 192 as being inside of a compressed air supply unit (as 192 is encapsulated by 190 in Figure 6 of Rutter).

Claim 9 of the present invention was rejected as-filed. The Applicant would like further instruction or clarification relating to the rejection of Claim 9, as the Official Action did not specifically refer to the same. As such, the Applicant contends that Claim 9 is not specifically rejected without an explanation thereto.

For these reasons, among others, the combination of Williams with Rutter cannot suggest the combination of features in applicant's Claims 6 - 9 , particularly as the same are now amended, and it is therefore submitted that the rejection against these claims should be withdrawn and Claims 6 - 9 allowed.

#### Paragraph 5 of the Official Action

The Official Action rejected Claim 10 under 35 U.S.C. §103(a) as being unpatentable over Williams in view of Rutter, and further in view of Cruchelow et al. The Applicant respectfully disagrees with this rejection of this claim.

The Applicant contends that Claim 10 should be allowable as filed. The present invention claims a first aperture and a second aperture in Claim 9 (which Claim 10 depends upon). The analysis stops short of Cruchelow et al. because there are no front and rear chambers needed as claimed in Rutter. Therefore, there are not two

USPTO Serial No. 10/634,259 (Docket No. ROSS-006)

apertures needed as shown in Rutter; the first and second aperture include one on each tube, not two on each tube. Rutter claims the front of the boatlift should be raised first to stabilize the front of the boat. The present invention does not have a boat positioned on the lift, so there is no need to raise the front of the boatlift first, hence no need for having two apertures per tube.

However, as this applies to the screen apparatus of Cruchelow et al. in view of Rutter, the Applicant respectfully requests that the further instruction from Claim 9 as requested above so as to form a better understanding of the rejection in 9 on which the rejection of 10 must be based at least in part.

For these reasons, among others, the combination of Williams with Rutter in further view of Cruchelow et al. cannot suggest the combination of features in applicant's Claim 10, and it is therefore submitted that the rejection against these claims should be withdrawn and Claim 10 allowed.

#### Paragraph 6 of the Official Action

The Official Action rejected Claim 11 under 35 U.S.C. §103(a) as being unpatentable over Williams in view of Lapeyre. Regarding the amended Claim 11 of the present invention, it is submitted that none of the cited references teaches or suggests the modification or usefulness of a boatlift buoyancy system for raising an entire boatlift off of the ground underneath the surface of the water to near the surface of a body of water. All of the cited references teach a system of using a pontoon structure to raise a watercraft above the surface of a body of water, but no cited references contemplate a system to float an entire boat lift.

For these reasons, among others, the combination of Williams with Lapeyre cannot suggest the combination of features in applicant's Claim 11, particularly as the

USPTO Serial No. 10/634,259 (Docket No. ROSS-006)

same are now amended, and it is therefore submitted that the rejection against these claims should be withdrawn and Claim 11 allowed.

**Paragraph 7 of the Official Action**

The Official Action rejected Claims 12 - 14 under 35 U.S.C. §103(a) as being unpatentable over Williams in view of Lapeyre and further in view of Rutter. The Applicant respectfully disagrees with this rejection of these claims, particularly as the same are now amended.

Claim 12 was rejected as-filed by the Official Action. Because Claim 12 relies upon the buoyancy system of Claim 11 as amended, it is contended that neither Williams nor Lapeyre contemplated that the vertical posts actually be lifted with the lift. However, Claim 12 is further distinguishable on its own. The Applicant contends that the valve structure of Rutter is overly complicated and unnecessary to lift a boat lift from the ground under the water to reposition the boatlift. Although separate filling tanks may be helpful in lifting a watercraft out of the water, to lift a boatlift up off of the bottom of a lake can be done by a process of simply flipping a switch, thereby floating the boatlift without unnecessary complications of many valves. Additionally, this process is desirable because often the vertical supports can be stuck under sand or mud under the water, so immediately filling the pontoons with air encourages the vertical supports to become dislodged.

Claim 13 was rejected as filed, however the Applicant contends that the valve unit and the valve assembly are two different types of valve setups. The valve unit of the present invention provides a simplified cross shaped valve unit having valves located at each of the four appendages facilitating simplified operation and determination of which valves need to be open or closed. The "valve assembly" was defined as "hoses connected through a series of valves to a compressed air supply." The present invention efficiently negates the possibility of searching through a maze of hoses to find a particular valve. However, since there is no illustration of the valve

USPTO Serial No. 10/634,259 (Docket No. ROSS-006)

assembly, there is no way to particularly define the valve assembly without consulting the Specification of Rutter.

Claim 14 of the present invention was rejected as-filed. The Applicant contends that review of Figure 6 does not show any specific structure of Rutter that would make Rutter analogous to the Y-shaped hose shown in Figures 4 and 5 of the present invention's drawings. The present invention shows an advantageous hose running directly to the tubes, whereas the structure and drawings of Rutter show the source 192 as being inside of a compressed air supply unit (as 192 is encapsulated by 190 in Figure 6 of Rutter).

For these reasons, among others, the combination of Williams with Lapeyre in further view of Rutter cannot suggest the combination of features in applicant's Claims 12-14, and it is therefore submitted that the rejection against these claims should be withdrawn and Claims 12 - 14 allowed.

**Paragraph 8 of the Official Action**

The Official Action rejected Claims 15 under 35 U.S.C. §103(a) as being unpatentable over Williams in view of Lapeyre and in further view of Cruchelow et al. The Applicant respectfully disagrees with this rejection of these claims.

The Applicant contends that Claim 15 should be allowable as filed. The present invention claims a first aperture and a second aperture in Claim 11. The analysis stops short of Cruchelow et al. because there are not intermittent air chambers for raising different parts of the platform as claimed in Lapeyre. Therefore, there is only one aperture per tube that is necessary to make the tubes efficient. The first and second aperture include one on each tube, not two on each tube. The present invention does not have a boat positioned on the platform, hence no need for having multiple apertures per to raise separate portions of the platform as Lapeyre states.